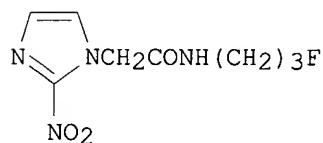


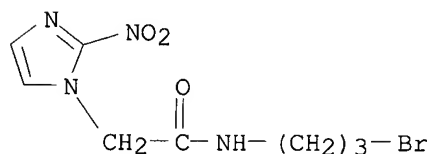
10-24-02

Abstract given
w/ written restriction
requirements

L3 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1999:719194 CAPLUS
 DOCUMENT NUMBER: 132:49925
 TITLE: Synthesis of new hypoxia markers EF1 and [18F]-EF1
 AUTHOR(S): Kachur, Alexander V.; Dolbier, William R., Jr.;
 Evans, Sydney M.; Shiue, Chyng-Yann; Shiue, Grace G.; Skov,
 Kirsten A.; Baird, Ian R.; James, Brian R.; Li,
 An-Rong; Roche, Alex; Koch, Cameron J.
 CORPORATE SOURCE: Department of Radiation Oncology, University of
 Pennsylvania, Philadelphia, PA, 19104, USA
 SOURCE: Applied Radiation and Isotopes (1999), 51(6), 643-650
 CODEN: ARISEF; ISSN: 0969-8043
 PUBLISHER: Elsevier Science Ltd.
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 LANGUAGE: English
 GI

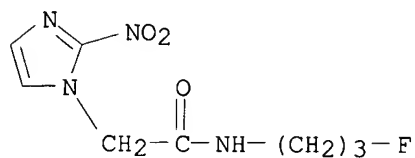


AB We report on the prepn. of a hypoxia marker
 2-(2-nitroimidazol-1[H]-yl)-N-
 (3-fluoropropyl)acetamide (EF1, I) and its 18F analog. Two methods for
 the prepn. of 3-fluoropropylamine, the EF1 side chain, are described.
 [18F]-EF1 was prepd. with a radiochem. yield of 2% by nucleophilic
 substitution of bromine in 2-(2-nitroimidazol-1[H]-yl)-N-(3-
 bromopropyl)acetamide (EBr1) by carrier-added 18F in DMSO at 120.degree..
 Our results demonstrate the prepn. of clin. relevant amts. of [18F]-EF1
 for use as a non-invasive hypoxia marker with detection using positron
 emission tomog.
 IT **252736-27-9P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and reaction with fluoride)
 RN 252736-27-9 CAPLUS
 CN 1H-Imidazole-1-acetamide, N-(3-bromopropyl)-2-nitro- (9CI) (CA INDEX
 NAME)



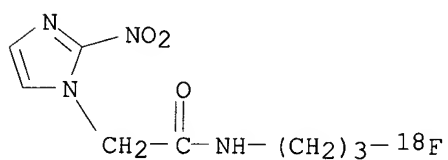
IT **252736-28-0P 252736-29-1P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 252736-28-0 CAPLUS

CN 1H-Imidazole-1-acetamide, N-(3-fluoropropyl)-2-nitro- (9CI) (CA INDEX NAME)



RN 252736-29-1 CAPLUS

CN 1H-Imidazole-1-acetamide, N-[3-(fluoro-18F)propyl]-2-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT:
THIS

33

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